QUARTERLY SUMMARY

OF THE

IMPROVEMENTS AND DISCOVERIES

IN THE

MEDICAL SCIENCES.

ANATOMY AND PHYSIOLOGY.

Physiology of Reading.

M. JAVAL (*Annales d'Oculistique*, Novembre–Decembre, 1879), treats of the causes which render reading fatiguing. He considers them to be (1) the constant tension of accommodation, (2) the constant fixation of the eyes, and (3) the fact that books are written in black characters on a white ground. The eye is not achromatic, and therefore theoretically vision should be more distinct when one of the extremities of the spectrum furnished by the colour of the paper has been annulled. He would, therefore, seek a paper which should reflect blue and violet less strongly than the other colours. A yellow paper, manufactured from wood-fibre, best fulfils these indications. As regards myopia, the author considers it may be produced directly from reading too small print at an early age. He holds that the size of the print used should be strictly progressive with the age of the child and its skill in reading. Other things being equal, the legibility of any text depends not on the height, but on the breadth of the letters, and he would invoke legislative interference to compel schoolmasters to use only print of a certain fineness in the lower forms. Progressive myopia, he considers in many cases is due to the use of too strong glasses, and to the excessive length of lines in books and journals. In binocular vision, the movements of accommodation are extremely rapid and complicated, and are very much influenced by the length of the line over which the eye has to range. Eventually the myope has to move his head in reading, and this necessarily is really a great safeguard against the further progress of his myopia.—*London Med. Record*, Feb. 15, 1880.

MATERIA MEDICA AND THERAPEUTICS.

Quebracho, a Palliative Remedy in Dyspnœa.

DR. PENZOLDT'S discovery (*American Journal of the Medical Sciences*, Oct. 1879, p. 547) that various forms of dyspnœa can be alleviated by quebracho bark, receives confirmation from two recent writers in the *Berliner Klin. Wochenschrift*, No. 52, 1879—DR. BERTHLOD, of Dresden, and DR. PICOT, of Carlsrühe. By both, Penzoldt's extract (referred to in our former notice) was rigidly adhered to. Dr. Berthlod relates two cases of spasmodic asthma which were much benefited by the new drug. In the first the respirations fell after three doses from 64 to 30, with general improvement of the symptoms; in the second, where the asthma depended on emphysema, the effect was less rapidly produced; but the patient, who had been under Dr. Berthlod's care for four years, and who generally had to lie up for one or two weeks at the time of his attacks, was about again in five days. In a case of mitral incompetence and stenosis, quebracho relieved the severe nocturnal dyspnœa most decidedly; in two advanced cases of fatty degeneration of the heart it also did good, but digitalis had to be given for the relief of œdema, over which the quebracho exerted no influence whatever. Dr. Berthlod, however, from his small experience is inclined to regard the latter drug as indicated in cardiac disease when the pulse becomes irregular under the action of digitalis, and when orthopnœa continues after the digitalis has been omitted. In one or two cases of chronic bronchitis, and in several cases of phthisis in the latter stages, the drug proved unsatisfactory; in two patients with phthisis, however, it relieved the dyspnœa wonderfully. In one of these the respirations fell from 52 to 28 after teaspoonful doses of the extract every two hours.

Dr. Picot not only gave quebracho with good results to three patients with catarrhal pneumonia, bronchial asthma, and cardiac disease, dyspnœa being in each case an urgent symptom, but he experimented on himself with it as to its effect in diminishing shortness of breath in climbing hills. On three following days, the temperature and height of barometer remaining nearly unaltered, he ascended the same height in the same period of time. On the first day, without quebracho, his respirations rose from 16 to 42, his pulse from 64 to 94. On the second day, half an hour before starting, he took fifteen grammes of Penzoldt's extract, and reached his destination with respirations at 30 and a pulse of 80, feeling also in every way easier, as was further proved by his being able to smoke during the ascent, which he could not at all manage the day before. On the third day, without quebracho, his symptoms corresponded to those of the first day. He has also seen good results in two persons without evident organic disease, but liable to breathlessness in walking fast.

We must not omit to mention that, according to the *Wiener Med. Blätter* (No. 41, 1879), Professor SKODA, of Vienna, has not only found benefit himself from quebracho, but has prescribed it for others with success. It is possible that as an astringent in diarrhœa the resinous residue of the bark, which is only soluble in alcohol, may be of service. Dr. Berthlod noticing that the diarrhœa of a phthisical patient stopped while taking quebracho, has tried the resin in acute and chronic intestinal catarrh with good results. To children he gives 0.1 gramme in a pill, of which they take ten daily. English children, however, might object to the number prescribed.—*Med. Times and Gazette*, Feb. 14, 1880.

On the Relative Paralyzing Action of Atropia and Pilocarpine on the Heart.

Dr. SIDNEY RINGER and Mr. E. A. MORSHEAD have been making a series of experiments on the relative paralyzing action of atropia and pilocarpine on the heart (*Journal of Physiology*, vol. ii. No. 4) of the conclusions from which the following is a summary:—

1. Sulphate of atropia topically applied is almost as powerful a paralyzer of the heart as pilocarpine.
2. Atropia paralyzes either the excito-motory cardiac apparatus, or the cardiac muscle, or both these structures.